Confirmation No.: 2851

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Frances Jiang, et al. Group Art Unit: 2683

Serial No.: 10/699,452 Examiner: James D. Ewart

Filed: October 31, 2003 Atty. Dkt. No.: 2100.023700

For: Method Of Indicating Delay | Client Docket: Jiang 20-3-2-19

REPLY BRIEF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants hereby submit this Reply Brief to the Board of Patent Appeals and Interferences in response to the Examiner's Answer dated July 13, 2006. The statutory response due is two months from the date of the Examiner's Answer, therefore, it is due September 13, 2006. Since this Reply Brief is being filed on or before September 13, 2006, it is timely filed.

It is believed that no fee is due for the filing of this Reply Brief. However, should any additional fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed material, or should an overpayment be included herein, the Assistant Commissioner is authorized to deduct or credit said fees from Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/2100.023700.

If an extension of time is required to enable this paper to be timely filed and there is no separate Petition for Extension of Time filed herewith, this paper is to be construed as also constituting a Petition for Extension of Time Under 37 CFR § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

ARGUMENT

In the Answer, the Examiner repeated the rejections under 35 U.S.C. § 103 set forth in the final rejection in this application. It is believed that the reasons that those rejections are improper are expressly set forth in the Appeal Brief filed in this matter. As is evident from the Applicants' Opening Brief and the Examiner's Answer, the issues with respect to this case center on the proper interpretation of "sending an estimated delay length," as set forth in the claims when read in light of the Specification.

More specifically, independent claim 1 of the present application is directed to a method of communication that, among other things, includes in response to a request for service, transmitting at least one message comprising existing delay information corresponding with an estimated delay length associated with accessing the service through an open loop network. On the other hand, Ament, the primary reference in the rejection which is being appealed, has been cited as disclosing a "waiting time" for a service.

The Examiner has maintained that the <u>waiting time</u> in *Ament* corresponds to "the estimated delay length" for the purposes of the rejection. In particular, the Examiner argues that as interference and other communication conditions vary, there will be variations in throughput and thus also in the time to accomplish a communication service. As a consequence, the Examiner argues, the waiting time of *Ament* must also be an "estimate."

However, Ament (the Examiner's own primary reference) does <u>not</u> support the Examiner's position. To the contrary, Ament uses the term "waiting time" differently from the Examiner. As such, the Examiner's interpretation of Ament is undercut by the teachings of Ament itself. Therefore as explained below, Ament either alone or in combination with Bender and/or Buford cannot render obvious any of the claims of the present application.

Appellants' Specification describes, among other things, calculating a <u>delay value D</u> <u>estimate</u> that may be modeled using a delay distribution algorithm <u>to determine the expected delay</u>. See the Appellants Specification, page 9, lines 17-23, and Figure 3. Once a service request is transmitted, the method calculates what <u>delay might be expected</u> by examining delay information and patterns that may be <u>heuristically determined</u> over time. See Applicants Specification, page 9, lines 3-5.

Independent claim 1 is directed to a method of communication that, among other things, includes in response to a request for service, transmitting at least one message comprising existing delay information corresponding with an estimated delay length associated with accessing the service through an open loop network. In Ament, by contrast, "any waiting times" refers to the waiting times for those particular services that may be already waiting to be engaged but have to wait for an engagement based on the priority information transmitted to the resource manager 1 by a service requesting bus user.

Ament does not reach so far as to teach or suggest the present invention because, among other things, Ament's "any waiting times" for particular services do not indicate existing delay information corresponding with an estimated delay length associated with accessing a service. Instead, Ament transmits known waiting time information for queued services and uses this known information along with a priority indication from a new service request to provide a service to a bus user. In particular, the waiting times described by Ament are for those services that have been already waiting in a list to be engaged and is not a wait time for a service being requested by a bus user. That is, Ament uses known waiting time information for queued services along with a priority indication from a new service request to provide a service to a bus user.

In other words, Ament applies information about (i) the priority of the current request and (ii) the waiting times for the already existing requests, to determine whether to provide a service to a bus user in a bus system. But Ament is completely silent with regard to any communications, in response to service requests, which provide estimates of wait times for services that the resource manger may or may not engage. To the contrary, the waiting times described by Ament pertain to services that are already queued in a waiting list to be engaged.

Contrary to the interpretation discussed by the Examiner in the Answer on pages 5 and 6,

Ament records the actual engagement times of the already requested services and does not
provide an estimated delay length. The Examiner equates Ament's "recorded engagement
times" of the current resource requests to Applicants' estimating delay length associated with
accessing a service. However, for reasons presented above, the actual engagement times of the
already requested services cannot be the "estimated" delay length associated with accessing a
service. Ament is only concerned with transmitting the recorded engagement times of the
current resource requests, as discussed above.

In Ament, the resource manager controls the service engagement on the basis of a priority information item that is transmitted to the resource manager in a message from the requesting bus user. See Ament, paragraph [0009], page 1. Ament teaches use of the priority of the current request to determine whether to engage the service for the requesting bus user by the resource manager. Contrary to Ament, independent claim 1 recites transmitting at least one message comprising existing delay information corresponding with an estimated delay length.

Accordingly, the Examiner provides no basis for equating the "estimated delay length" to the "waiting time" other than the unsubstantiated, conclusory statement noted above. In the Answer, at page 5, the Examiner further notes that since *Ament* discloses in Figure 2 and paragraphs [0002], [0021] and [0043] a waiting time for a service, it teaches transmitting an estimated delay length, as set forth in claim 1. The Examiner asserts that Appellants Specification discloses a computed delay length, thus indicating the delay length is not estimated. Based on this disclosure, the Examiner concludes that the delay length is not described in the Specification. See the Examiner's Answer, at page 6. However, the Examiner makes this assertion even though the Appellants Specification in Figure 3 illustrates otherwise, as noted above. Since Ament does not teach or suggest transmitting existing delay information and does not estimate delay length associated with accessing the service, it, clearly cannot supply the missing claimed features in claim 1. Accordingly, Ament also fails to provide any suggestion or motivation to modify the prior art directed to arrive at the claimed invention.

Applicants submit that the pending claims are not obvious in view of Ament and Bender, either considered alone or in combination since neither Ament nor Bender estimate delay length associated with accessing the service. Neither Ament nor Bender teaches or suggests transmitting a message comprising existing delay information corresponding with an estimated delay length. Moreover, Ament and Bender are directed to different fields of use. Ament is intended to control a service engagement in a data bus system and Bender is directed to rapid assignment of a traffic channel in digital cellular communication systems.

For the aforementioned reasons, Appellants respectfully submit that the Examiner has failed to make a *prima facie* case that the present invention is obvious over *Ament* and in view of *Bender*. Appellants request that the Examiner's rejections of claims 1, 2, 5-9, 10, 11, and 14-17 under 35 U.S.C. 103(a) be <u>REVERSED</u>.

In the Office Action, claims 3, 4, 12 and 13 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable by *Ament* and *Bender* in view of *Buford*. However, *Buford* fails

to address the above-indicated shortcomings of *Ament* and *Bender*. With regard to claim 3, it sets forth that the estimated delay length comprises at least one time interval between a first instant corresponding with a received <u>autonomous service request generated at a predefined moment in time</u> and a second instant corresponding with granting service access.

The Examiner alleges that sending new access requests in an alternating manner after a give time as described by Buford equates to generating service requests sequentially at a predefined moment in time. Appellants respectfully disagree and submit that the Examiner has improperly interpreted the term "predefined moment in time." Buford selectively adds time delay to the base station in response to an initial access, the subscriber unit automatically sends new access requests at successively higher power levels, with a given time between attempts, and a specified limit to the number of attempts and the maximum power sent. See Buford, col. 17, lines 62-67 and Figure 19. Since Buford simply indicates a fixed period of time in an alternating manner, it is not equivalent to a predefined moment in time. Accordingly, Appellants respectfully submit that Buford fails to teach or suggest autonomous service request generated at a predefined moment in time.

Referring to claim 4, it sets forth that the predefined moment in time comprises at least one of a periodic and an aperiodic instant. The Examiner relies upon *Buford* to describe the predefined moment in time of a periodic and/or an aperiodic instant. However, *Buford* appears to teach away from defined instants of time, whereas the present invention teaches periodically or nonperiodically using the predefined moments in time.

In view of the foregoing, it is respectfully submitted that the Examiner erred in rejecting the claims pending in the present application. Accordingly, Applicants respectfully request that the Board overrule the Examiner's decision and issue instructions that all pending claims be allowed. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned at the Houston, Texas telephone number (713) 934-4089 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted.

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This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Landted Recognition No. <u>L0220</u> Expires: April 14, 2007

Date: September 13, 2006

Harry I Mosts

Director of Euroliment and Discipline